Risks of Using Polyacrylamide Gel (PAAG) for Breast Augmentation

Polyacrylamide Gel (PAAG) is a combination of a synthetic polymer (polyacrylamide) and water. It is a gel-like non-biodegradable material that cannot be absorbed into the body. PAAG has been reported to be used for breast enlargement. Although it does not require open surgery, the consequences of breast enlargement with injection of such material can be very serious.

In the manufacture of PAAG, there are residues of its raw material, acrylamide monomer, left in the product. This monomer is a genetic, reproductive and neural toxicant as well as a known carcinogen in animals.

Complications of breast augmentation with PAAG injection include breast lumps, infection, inflammation, bleeding, abscess, pain, change in skin sensation and contour, migration of gel, etc. In some cases, the conditions need treatment including complete removal of breasts. Once injected into the body, it is almost impossible to completely remove the gel from the body.

Breast implant is classified as a high risk medical device internationally. At present, no PAAG product is listed under the Medical Device Administrative Control System of the Department of Health.

The usual acceptable method for breast augmentation is implanting shells containing materials like saline solution or silicon-gel. Since there is little evidence in literature about the safety of PAAG being used for breast augmentation, DH has reservation about this use and does not recommend PAAG to be used for breast augmentation.

Anyone who plans to enlarge the breasts by means of injection or implantation of materials should seek advice from registered medical professionals beforehand. Anyone who has health problem after receiving injection of PAAG for breast augmentation is also advised to seek medical advice as soon as possible.

Medical Device Division
Department of Health
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